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Su Chin Chang

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EXAMINER

DARNO, PATRICK A

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/804,815	<b>Applicant(s)</b> CHANG ET AL.	
	<b>Examiner</b> PATRICK A. DARNO	<b>Art Unit</b> 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7-20,32,33,35 and 38-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7-20,32,33,35 and 38-52 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claim 52 is new. Claims 4, 6, 21-31, 34, and 36-37 are canceled. Claims 1 and 32 are amended. Claims 1-3, 5, 7-20, 32-33, 35, and 38-52 are pending in this office action.

### ***Claim Objections***

2. Claim 32 is objected to because of the following minor informalities:
- In claim 32 there appears to be typographical error. On page 5, line 6 of the claim received 02/27/2008, the characters "defiens" appear. It is assumed that this is simply a typing error and the characters are supposed to spell the word "defines."
  - Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, 11, 15, 17, 19, 32-37, 39-40, 41-44, 48, and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,734,889 issued to Tomoharu Yamaguchi (hereinafter "Yamaguchi").

### **Claim 1:**

Yamaguchi discloses a method of processing data stored in a structured data source, comprising:

receiving a natural language input (*Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39*);

analyzing the natural language input to identify semantic information contained therein (*Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39 and column 5, lines 20-27*);

associating portions of the natural language input with a command object identifying a command from a plurality of commands (*Yamaguchi: column 5, lines 64-67 and column 6, lines 10-13*;

*Note that the original natural language input is received by the computer system and parsed into multiple portions*

*(Yamaguchi: Fig. 19). The command portion of the natural language input is then associated with a command object in a particular object language. For instance, the example is given of translating the natural language input*

*into a SQL statement. Finally, note that the natural language input is associated with one of a plurality of SQL*

*commands.), a frame object identifying how to render data from a plurality of different ways to render data* (*Yamaguchi: column 6, lines 46-50 and column 4, line 61 - column 5, line 9 and abstract, lines 8-12*;

*Note that the retrieved data can be "reformed" before being placed in the spreadsheet. So there are exists at least two different ways to output the data. The first is output the data in the same form it was stored in the database, or the data can be reformed. See Fig. 8. This surely discloses a plurality of ways to render data.) and an entity object*

*of a schema based on the semantic information and the natural language input* (*Yamaguchi: Figs. 14-*

*17; The entity object associated with the natural language input is the actual table from which the data will be retrieved from. So in Fig. 14 for example, the entity object associated with the natural language input is the table*

*storing the company information (name, address, telephone, and fax).), wherein the entity object relates to*

*data in the data source that is to be rendered based on the command object and the frame object*

*(Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39 and column 5, lines 20-27 and abstract and Figs. 14-17); and*

rendering data from the data source in a table of columns and rows based on the schema and the associated portions of the natural language input (*Yamaguchi: see at least abstract*).

**Claim 2:**

Yamaguchi discloses all the elements of claim 1, as noted above, and Yamaguchi further discloses a method comprising accessing the data source to identify words and phrases associated with dimensions in the data source (*Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39 and column 5, lines 20-27*).

**Claim 3:**

Yamaguchi discloses all the elements of claim 2, as noted above, and Yamaguchi further discloses wherein accessing further comprises identifying words and phrases associated with levels and values in the data source (*Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39 and column 5, lines 20-27*).

**Claim 4:**

Yamaguchi discloses all the elements of claim 1, as noted above, and Yamaguchi further discloses wherein associating further comprises associating portions of the natural language input with a frame object of the schema, wherein the frame object corresponds to how to render data (*Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39 and column 5, lines 20-27 and abstract*).

**Claim 5:**

Yamaguchi discloses all the elements of claim 1, as noted above, and Yamaguchi further discloses wherein the command object relates to a task to be performed for rendering data (*Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39 and column 5, lines 20-27 and abstract*).

**Claim 7:**

Yamaguchi discloses all the elements of claim 1, as noted above, and Yamaguchi further discloses:

changing the table based on a further command received (*Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39 and column 5, lines 20-27 and abstract*).

**Claim 11:**

Yamaguchi discloses all the elements of claim 7, as noted above, and Yamaguchi further discloses wherein the further command is adding information to the table (*Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39 and column 5, lines 20-27 and abstract*).

**Claim 15:**

Yamaguchi discloses all the elements of claim 1, as noted above, and Yamaguchi further discloses:

providing an interactive interface to a user for entering the natural language input (*Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39 and column 5, lines 20-27 and abstract*).

**Claim 17:**

Yamaguchi discloses all the elements of claim 1, as noted above, and Yamaguchi further discloses:

rendering a natural language description of information in the table (*Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39 and column 5, lines 20-27 and abstract; At least the data in the generated table (spreadsheet) is natural language.*).

**Claim 19:**

Yamaguchi discloses all the elements of claim 1, as noted above, and Yamaguchi further discloses:

associating portions of the natural language input with words and phrases associated with the data source (*Yamaguchi: see at least column 2, lines 60-67 and column 4, lines 26-39 and column 5, lines 20-27 and abstract*).

**Claims 32-37, 39-40, & 41-44:**

Claims 32-37, 39-40, and 41-44 are rejected under the same reasons set forth in the rejection of claim 1.

**Claim 48:**

Claim 48 is rejected under the same reasons set forth in the rejection claim 11.

**Claim 51:**

Claim 51 is rejected under the same reasons set forth in the rejection of claim 19.

**Claim 52:**

Yamaguchi discloses all the elements of claim 41, as noted above, and Yamaguchi further discloses wherein the second natural language input includes a command that is different from the command object (*Yamaguchi: column 5, lines 64-67 and column 6, lines 10-13; The inputted natural language statement is a retrieve command. This command is translated to the command object in the schema (retrieval formula written in SQL). This is written SQL formula is a structured query language programming statement wherein the inputted command is a natural language statement. At the very least, the two commands are different in name (natural language is "retrieve" and SQL is some form of "Select") and structure (a structured query language as a particular syntax that is different from a natural language statement).*).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-10, 12, 18, 45-47, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi and further in view of U.S. Patent Application Publication Number 2005/0216421 issued to B. Reilly Barry et al. (hereinafter "Barry").

**Claim 8:**

Yamaguchi discloses all the elements of claim 7, as noted above, but Yamaguchi does not explicitly disclose wherein the further command is highlighting a portion of the table.

However, Barry discloses wherein the further command is highlighting a portion of the table (*Barry: see at least paragraph [0362] and paragraph [0364] and fig. 25(h)*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi with the teachings of Barry noted above. The skilled artisan would have been motivated to improve the teachings of Yamaguchi per the above such that one could select table columns, thereby providing the user with the means to reorder table columns by dragging and dropping each column to its desired location (*Barry: paragraph [0264]*). Such flexibility in table design lets the user format the table to his/her liking.

**Claim 9:**

Yamaguchi discloses all the elements of claim 7, as noted above, but Yamaguchi does not explicitly disclose wherein the further command is sorting a portion of the table.



However, Barry discloses wherein the further command is sorting a portion of the table  
(Barry: see at least paragraph [0228] and paragraph [0275] and paragraph [0564]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings Yamaguchi with the teachings of Barry noted above. The skilled artisan would have been motivated to improve the teachings of Yamaguchi per the above such that the user is provided with a means for analyzing and displaying data stored that is stored in a server (Barry: see at least paragraph [0228]).

**Claim 10:**

Yamaguchi discloses all the elements of claim 7, as noted above, but Yamaguchi does not explicitly disclose wherein the further command is filtering information in the table.

However, Barry discloses wherein the further command is filtering information in the table (Barry: paragraph [0275]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings Yamaguchi with the teachings of Barry noted above. The skilled artisan would have been motivated to improve the teachings of Yamaguchi per the above such that the user is provided with a means for analyzing and displaying data stored that is stored in a server (Barry: see at least paragraph [0228]).

**Claim 12:**

Yamaguchi discloses all the elements of claim 7, as noted above, but Yamaguchi does not explicitly disclose wherein the further command is clearing information in the table.

However, Barry discloses wherein the further command is clearing information in the table (Barry: see at least paragraph [0211] and paragraph [0222] and paragraph [0362]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi with the teachings of Barry noted above. The skilled artisan would have been motivated to improve the teachings of Yamaguchi per the above such that information that is no longer needed, can be removed from the database management system.

**Claim 18:**

Yamaguchi discloses all the elements of claim 1, as noted above, but Yamaguchi does not explicitly disclose:

maintaining a history of previous tables rendered for future use.

However, Barry discloses maintaining a history of previous tables rendered for future use

*(Barry: see at least paragraph [0251]; Note that generated reports (tables) can be saved).*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi with the teachings of Barry noted above. The skilled artisan would have been motivated to improve the teachings of Yamaguchi noted above such that a report that has already been generated does not need to be regenerated in the future. This is advantageous because it avoids performing redundant work.

**Claim 45:**

Claim 45 is rejected under the same reasons set forth in the rejection of claim 8.

**Claim 46:**

Claim 46 is rejected under the same reasons set forth in the rejection of claim 9.

**Claim 47:**

Claim 47 is rejected under the same reasons set forth in the rejection of claim 10.

**Claim 49:**

Claim 49 is rejected under the same reasons set forth in the rejection of claim 12.

5. Claims 13 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi and further in view of U.S. Patent Number 6,581,068 issued to Pierre Bensoussan et al. (hereinafter “Bensoussan”).

**Claim 13:**

Yamaguchi discloses all the elements of claim 7, as noted above, but Yamaguchi does not explicitly disclose wherein the further command includes switching the row and column information.

However, Bensoussan discloses wherein the further command includes switching the row and column information (*Bensoussan: column 10, line 63 - column 11, line 4 and column 16, lines 46-48 and column 17, lines 39-45*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi with the teachings of Bensoussan noted above. The skilled artisan would have been motivated to improve the teachings of Yamaguchi per the above in order to grant the user flexibility to decide how to present stored data.

**Claim 50:**

Claim 50 is rejected under the same reasons set forth in the rejection of claim 13.

6. Claims 14, 16, 20, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi and further in view of U.S. Patent Number 5,960,384 issued to Douglas E. Brash (hereinafter “Brash”).

**Claim 14:**

Yamaguchi discloses all the elements of claim 1, as noted above, but Yamaguchi does not explicitly disclose:

presenting candidate interpretations based on the natural language input.

However, Brash discloses:

presenting candidate interpretations based on the natural language input (*Brash: column 26, line 6 - column 27, line 4*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi with the teachings of Brash noted above. The skilled artisan would have been motivated to improve the teachings of Yamaguchi per the above because the method disclosed by Brash achieves greater efficiency by using a smaller rule set, thereby minimizing rule-choice decisions (*Brash: column 8, lines 7-11*).

**Claim 16:**

Claim 16 is rejected under the same reasons set forth in the rejection of claim 14.

**Claim 20:**

Claim 20 is rejected under the same reasons set forth in the rejection of claim 14.

**Claim 38:**

Claim 38 is rejected under the same reasons set forth in the rejection of claim 14.

*Response to Arguments*

**Applicant Argues:**

Yamaguchi describes retrieving data and inputting retrieved data to a spreadsheet. A descriptive sentence input means and a natural language interface means are utilized to implement a retrieval formula. In utilizing the retrieval formula, Yamaguchi only describes a single command (i.e., retrieving).

**Examiner Responds:**

Examiner is not persuaded. As best the Examiner can ascertain, the Applicant is arguing the limitation reciting "...associating portions of the natural language input with a command object identifying a command from a plurality of commands...". The Examiner asserts that this limitation is disclosed by Yamaguchi.

Specifically, note that the original natural language input is received by the computer system and parsed into multiple portions (*Yamaguchi: Fig. 19*). The command portion of the natural language input is then associated with a command object in a particular object language. For instance, the example is given of translating the natural language input into a SQL statement. The relationship triggered to translate the incoming command from the natural language form to the different structured query form is the association to between the two query forms.

Furthermore, the claim limitation as it exists now seems to recite associating a **single** natural language command with one of a plurality of other command objects (as opposed to more than one type of natural language command associated more than one plurality of other command objects). The Examiner asserts that Yamaguchi discloses this feature by taking the single "retrieve" command and associating it with one SQL command (typically a form of

"select" query) from a plurality of SQL commands ("select", "delete", "insert", and "update").

Since it appears that each and every element of the Applicant's claimed invention is either disclosed or suggested by the prior art of record, the claims remain rejected under the reasons set forth in the preceding office action.

**Applicant Argues:**

Additionally, Yamaguchi makes no mention of how data is to be rendered, but only mentions particular tables. Instead, since there is only a single retrieve command, it is likely that data is rendered in the same manner in which it is stored in the database. To this extent, Yamaguchi fails to discuss a frame object and the Office Action has failed to cite any object evidence related to the use of a frame object. From the reading of Yamaguchi, only one way to render data is provided.

Additionally, claim 1 recites a frame object that identifies how to render the data from a plurality of different ways. Thus, some data may be displayed in a column whereas other data is displayed in a row depending on the natural language input received. It is submitted that these features are simply not taught by Yamaguchi.

**Examiner Responds:**

Examiner is not persuaded. The Examiner asserts that Yamaguchi discloses a frame object that identifies how to render data (*Yamaguchi: column 6, lines 46-50 and column 4, line 61 - column 5, line 9 and abstract, lines 8-12*).

Note Yamaguchi discloses that the retrieved data can be "reformed" before being placed in the spreadsheet. So there are exists at least two different ways in which Yamaguchi outputs the data. The first is outputting the data in the same form as it was stored in the database (*as indicated by the Applicant in page 8 of the remarks received 02/27/2008*), or the data can be **reformed** as disclosed in Yamaguchi (*Yamaguchi: column 6, lines 46-50 and column 4, line 61 - column 5, line 9 and abstract, lines 8-12*). The "frame object" in Yamaguchi is the component which decides which rendering method to use. This component appears to be detailed further in Yamaguchi: Fig. 8.

Finally, the Examiner respectfully disagrees with the Applicant that Yamaguchi fails to disclosed wherein some data may be displayed in a column whereas other data is displayed in a row depending on the natural language input received. It is clear throughout the Yamaguchi reference that based upon a natural language input, data is returned to a spreadsheet. A spreadsheet comprises columns and rows. Since the data is displayed in a spreadsheet comprising columns and rows, it follows that at least some of the data is stored in columns whereas some of the other data is displayed in rows. There is simply no other place to put the data in a spreadsheet except for in columns and rows.

Since it appears that each and every element of the Applicant's claimed invention is either disclosed or suggested by the prior art of record, the claims remain rejected under the reasons set forth in the preceding office action.

**Applicant Argues:**

As discussed above, in contrast to Yamaguchi, the subject matter of claim 32 provides a frame object that defines what data is to be provided in the columns and what data is to be provided in rows. Yamaguchi does not provide this flexible interface that allows a user, through the natural language input, to specify where data is to be displayed. Instead, as suggested above, it appears that the data is merely reproduced as a function of how it is stored in a particular database.

**Examiner Responds:**

Examiner is not persuaded. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a "flexible interface that allows the user, through the natural language input, to specify where data is to be displayed.") are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the

specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Yamaguchi discloses receiving a natural language input, and based upon this natural language input the Yamaguchi reference retrieves data from a data store, and this retrieved data is then placed into a spreadsheet (*Yamaguchi: abstract*). Some of the data is placed into columns, and some of the data is placed into rows. How this data is placed into the columns and rows is determined or defined by the computer program retrieving the data. This process appears to be sufficient to anticipate the Applicant's claim language of claim 32 as it exists at this time.

With that in mind, Yamaguchi does not appear to disclose the limitation as argued by the Applicant (i.e., a “flexible interface that allows the user, through the natural language input, to specify where data is to be displayed.”). An amendment of that nature may overcome the rejection given under 35 U.S.C. 102 with respect to the Yamaguchi reference. Such an amendment would need to be sure to have proper support in the Applicant's specification to fulfill requirements under 35 U.S.C. 112, first paragraph. Furthermore, the driving point of the amendment should be the idea that the user is directing the data to specific portions of the display based upon specific commands in the natural language input.

However, since it appears that each and every element of the Applicant's claimed invention is either disclosed or suggested by the prior art of record, the claims remain rejected under the reasons set forth in the preceding office action.



**Applicant Argues:**

In contrast to the subject matter recited in claim 41, Yamaguchi simply does not disclose or otherwise describe modifying a current table that has been displayed. Throughout Yamaguchi, the only commands that are utilized are retrieval of data.

**Examiner Responds:**

Examiner is not persuaded. It appears that Yamaguchi may disclose modifying a current table that has been displayed. The composition of the output table of Yamaguchi is based upon the columns of data asked for in the natural language query (i.e, company name, address, telephone number, and fax number). By modifying the columns asked for (i.e., first query comprises company name and company address...second query comprises company name and telephone number), one can modify the table that has been displayed.

Since it appears that each and every element of the Applicant's claimed invention is either disclosed or suggested by the prior art of record, the claims remain rejected under the reasons set forth in the preceding office action.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick A. Darno whose telephone number is (571) 272-0788. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick A. Darno/  
Examiner  
Art Unit 2163  
05-23-2008

PAD

Application/Control Number: 10/804,815  
Art Unit: 2163

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Supervisory Patent Examiner, Art Unit 2163